

District 10 Mobility Performance Report

2015 Third Quarter

DEPARTMENT OF TRANSPORTATION

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EXECUTIVE SUMMARY

Overview

Caltrans District 10 contains eight counties located within the Central Valley (San Joaquin / Stanislaus / Merced) and the Sierra Nevada (Amador / Calaveras / Tuolumne / Mariposa / Alpine). Over the years detection in Alpine and Calaveras Counties has been sparse, so the District 10 Mobility Performance Report (MPR) no longer includes these two counties in the quarterly or annual analysis.

The MPR quarterly analysis compares information in the current quarter to that of the previous quarter and the quarter one year prior. The following are the performance measures reported in the MPR:

- Vehicle Miles Traveled (VMT)
- Vehicle Hours of Delay (VHD)
- Lost Lane Miles (LLM)
- Detector Health (DH)

This information is based on data collected every day of the quarter, twenty-four hours a day, by automated vehicle detector stations deployed on urban-area freeways where congestion is regularly experienced. The MPR presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The delay at the 35 mph threshold represents severe congestion while delay at 60 mph

represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

In the third quarter, total delay equaled 67 thousand vehicle hours of delay (VHD) at the 35 mph speed threshold, and 354 thousand VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 861 VHD at 35 mph, and 4,834 VHD at 60 mph.

Top Ten Bottlenecks for 2015 Quarter 3

FWY	COUNTY	LOCATION	SHIFT	ABS. PM	CA PM	# DAYS ACTIVE	AVG. EXTENT (MILES)	TOTAL DELAY (VEH-HRS)	TOTAL DURATION (MINS)
I205-W	SJ	E OF HANSEN RD	AM	3.310	2.380	52	4.9	89233	7670
SR99-S	STA	Maze Blvd	PM	227.325	16.290	39	3.3	4464	3070
I5-N	SJ	N/O French Camp Rd	PM	468.140	R22.648	52	0.4	1983	7140
SR99-S	STA	N/O Rte 219/Kiernan Ave	PM	233.625	22.590	7	4.3	1600	490
SR99-S	STA	Hammett Rd	PM	235.307	24.272	22	3.2	1076	1060
I205-E	SJ	E of Hansen Rd	PM	3.310	2.380	4	4.9	1008	240
SR99-S	SJ	Austin Rd	PM	240.818	5.033	6	1.2	813	520
SR4-W	SJ	E/O I-5	PM	64.034	R16.500	7	3.5	751	330
SR99-S	SJ	N/O On Ramp from Jack Tone Rd	PM	237.866	2.081	11	0.9	624	755
SR99-S	SJ	S/O Rte 120	PM	241.202	5.417	19	0.5	394	1225

2015 Q3 Quarterly Mobility Statistics – District 10

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table><tr><th>Quarter</th><th>VMT (Billions)</th></tr><tr><td>2014 Q3</td><td>1.0</td></tr><tr><td>2015 Q2</td><td>1.1</td></tr><tr><td>2015 Q3</td><td>1.1</td></tr></table>	Quarter	VMT (Billions)	2014 Q3	1.0	2015 Q2	1.1	2015 Q3	1.1	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
2014 Q3	1.0										
2015 Q2	1.1										
2015 Q3	1.1										
		7.6% ↑	3.1% ↑								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table><tr><th>Quarter</th><th>VHD (Thousands)</th></tr><tr><td>2014 Q3</td><td>39</td></tr><tr><td>2015 Q2</td><td>131</td></tr><tr><td>2015 Q3</td><td>67</td></tr></table>	Quarter	VHD (Thousands)	2014 Q3	39	2015 Q2	131	2015 Q3	67	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2014 Q3	39										
2015 Q2	131										
2015 Q3	67										
		71% ↑	-49.4% ↓								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table><tr><th>Quarter</th><th>VHD (Hours)</th></tr><tr><td>2014 Q3</td><td>567</td></tr><tr><td>2015 Q2</td><td>1,944</td></tr><tr><td>2015 Q3</td><td>861</td></tr></table>	Quarter	VHD (Hours)	2014 Q3	567	2015 Q2	1,944	2015 Q3	861	Over one year ago	Over last quarter
		Quarter	VHD (Hours)								
2014 Q3	567										
2015 Q2	1,944										
2015 Q3	861										
		51.8% ↑	-55.7% ↓								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table><tr><th>Quarter</th><th>VHD (Thousands)</th></tr><tr><td>2014 Q3</td><td>306</td></tr><tr><td>2015 Q2</td><td>412</td></tr><tr><td>2015 Q3</td><td>354</td></tr></table>	Quarter	VHD (Thousands)	2014 Q3	306	2015 Q2	412	2015 Q3	354	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2014 Q3	306										
2015 Q2	412										
2015 Q3	354										
		15.6% ↑	-14% ↓								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours</p> <table><tr><th>Quarter</th><th>VHD (Hours)</th></tr><tr><td>2014 Q3</td><td>4,282</td></tr><tr><td>2015 Q2</td><td>5,859</td></tr><tr><td>2015 Q3</td><td>4,834</td></tr></table>	Quarter	VHD (Hours)	2014 Q3	4,282	2015 Q2	5,859	2015 Q3	4,834	Over one year ago	Over last quarter
		Quarter	VHD (Hours)								
2014 Q3	4,282										
2015 Q2	5,859										
2015 Q3	4,834										
		12.9% ↑	-17.5% ↓								

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Tuesday -11.6%	Thursday -48.3%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		6 AM -81.1%	3 PM -61.3%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		10 AM -39.9%	10 AM -85%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		9 PM -95.3%	
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		5 PM 17316.9%	2 PM 1214.7%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	<p>Hours (Thousands)</p> <p>2014 Q3 2015 Q2 2015 Q3</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		-	Stanislaus -66.8%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		San Joaquin 132.4%	Mariposa 97.9%
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	<p>Miles</p> <p>2014 Q3 2015 Q2 2015 Q3</p> <p>AM Peak (6 AM to 10 AM) Off-Peak Day (10 AM to 3 PM) PM Peak (3 PM to 7 PM) Off-Peak Night (7 PM to 6 AM)</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		-	AM Peak -63.2%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 77.2%	-
Average Number of Good and Bad Detectors	<p>Number of Detectors</p> <p>Average of Good Average of Bad</p> <p>2014 Q3 2015 Q2 2015 Q3</p>	Change in Good over one year ago	Change in Good over last quarter
		-4%	2%
		Change in Bad over one year ago	Change in Bad over last quarter
		44%	10%

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2015 Q3-2014 Q3		Difference 2015 Q3-2015 Q2		Rank		
		2014 Q3	2015 Q2	2015 Q3	Absolute	Percentage	Absolute	Percentage	2014 Q3	2015 Q2	2015 Q3
I205	San Joaquin	12281.5	103481.5	162765.6	150484.1	1225%	59,284	57%	2	1	1
SR99	San Joaquin	7321.9	16300.8	24091.9	16770	229%	7,791	48%	3	4	2
SR99	Stanislaus	21325.9	71546.2	21686.5	360.6	2%	(49,860)	-70%	1	2	3
SR4	San Joaquin	6000.1	27976.1	7818.8	1818.7	30%	(20,157)	-72%	4	3	4
I580	San Joaquin	2525.6	1915.8	5791.9	3266.3	129%	3,876	202%	5	9	5
SR152	Merced	821.8	2340.7	4010.3	3188.5	388%	1,670	71%	8	8	6
I5	San Joaquin	2273.6	2628.9	3960.2	1686.6	74%	1,331	51%	6	6	7
I5	Stanislaus	47.8	5258.9	3830.2	3782.4	7913%	(1,429)	-27%	10	5	8
SR99	Merced	879.6	2366.4	456.9	-422.7	-48%	(1,910)	-81%	7	7	9
SR49	Mariposa	183.9	95.8	189.6	5.7	3%	94	98%	9	10	10
I5	Merced	0.1	44.3	19.7	19.6	19600%	(25)	-56%	13	12	11
SR132	San Joaquin	1.2	44.9	13.4	12.2	1017%	(32)	-70%	12	11	12
SR104	Amador	0	0	0	0		-				
SR108	Tuolumne	0	0	0	0		-				
SR12	San Joaquin	0	0	0	0		-				
SR120	San Joaquin	1.9	0	0	-1.9	-100%	-		11		
SR120	Tuolumne	0	0	0	0		-				
SR219	Stanislaus	0	0	0	0		-				
TOTALS		53,665	234,000	234,635	180,970	337%	635	0%			

SR104 Amador: No delay detected in 2014 Q3, 2015 Q2, and 2015 Q3

SR 108 Tuolumne: No delay detected in 2014 Q3, 2015 Q2, and 2015 Q3

SR 12 San Joaquin: No delay detected in 2014 Q3, 2015 Q2, and 2015 Q3

SR 120 San Joaquin No delay detected in 2015 Q2 and 2015 Q3

SR 120 Tuolumne: No delay detected in 2014 Q3, 2015 Q2, and 2015 Q3

SR 219 Stanislaus: No delay detected in 2014 Q3, 2015 Q2, and 2015 Q3